



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,405	10/18/2001	Hideyuki Takai	1776-4067	9536

27123 7590 11/05/2004  
MORGAN & FINNEGAN, L.L.P.  
3 WORLD FINANCIAL CENTER  
NEW YORK, NY 10281-2101

EXAMINER

FEELY, MICHAEL J

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/913,405

Applicant(s)

TAKAI ET AL.

Examiner

Michael J. Feely

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 14, 18-22, 33, 34, 38, 43, 54 and 55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-22, 33, 34, 38, 43, 54 and 55 is/are allowed.
- 6) ☒ Claim(s) 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Pending Claims***

Claims 14, 18-22, 33, 34, 38, 43, 54, and 55 are pending.

### ***Previous Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. The rejection of claims 23, 26, 27, 29-32, and 48-51 under 35 U.S.C. 102(e) as being anticipated by Murai et al. (US Pat. No. 6,437,090) has been rendered moot by the cancellation of claims 23, 26, 27, 29-32, and 48-51.

### ***Previous Claim Rejections - 35 USC § 102/103***

3. The rejection of claims 24 and 28 under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Murai et al. (US Pat. No. 6,437,090) has been rendered moot by the cancellation of claims 24 and 28.

### ***Previous Claim Rejections - 35 USC § 103***

4. The rejection of claims 1-7, 9-13, 15-17, 25, 35-37, 39-42, 44-47, 52, 53, 56 and 57 under 35 U.S.C. 103(a) as being unpatentable over Ikushima et al. (US Pat. No. 6,015,848) in view of Murai et al. (US Pat. No. 6,437,090) has been rendered moot by the cancellation of claims 1-7, 9-13, 15-17, 25, 35-37, 39-42, 44-47, 52, 53, 56 and 57.

### ***Previous Allowable Subject Matter***

5. The indicated allowability of claim 14 is withdrawn. Rejections follow.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 1712

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The new version of claim 14 is unclear for a few reasons: 1) it unclear what is involved in the preparation of the acrylic resin (i-2), 2) it is unclear if the "polymerization" take place in the preparation of the acrylic resin (i-2) or if it is a future limitation.

Referring to the specification (see page 33), it is still not completely clear; however, it appears that that acrylic (i-2) is prepared by constructing monomers by means of polymerization in the presence of a solvent, including epoxy resin (i-1). The prepared acrylic (i-2) has functional groups which are capable of reacting with ionic species in a curable resin composition that is free of volatile solvent.

Hence, it appears that the claim should read:

A method for the preparation of a curable resin composition comprising the steps of:  
preparing an acrylic resin (i-2) by constructing monomers by polymerization in presence of a solvent, wherein said solvent includes an epoxy resin (i-1); said acrylic resin (i-2) has functional groups which are capable of reacting with ionic species in a curable resin composition that is free of volatile solvent; and

preparing a curable resin composition by combining: (i-1) said epoxy compound, wherein said epoxy compound has ionic polymerizability and viscosity of not more than 1,000 cP at 25°C, (i-2) said acrylic resin having an ionic polymerization functional group, and (3) a thermally-activating ionic polymerization catalyst which can be dissolved by heating and

Art Unit: 1712

crystallized by cooling; said polymerization catalyst having a substituted hydrocarbon group having a carbon number of more than 10, or a nonsubstituted hydrocarbon group having a carbon number of more than 10, or a cyclic organic structure having a more than 10 carbon number hydrocarbon group.

***Allowable Subject Matter***

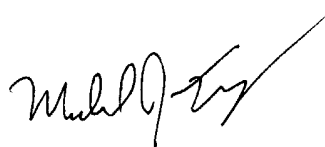
8. Claims 18-22, 33, 34, 38, 43, 54, and 55 are allowed.
9. Claim 14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

*Communication*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael J. Feely  
Patent Examiner  
Art Unit 1712

November 1, 2004